

## ABSTRACT

The invention relates to a data transmission system between two transceivers, comprising: dividing the symbols to be transmitted into blocks, the number of which is divisible by the number of transmitting antennas; transmitting one block using each antenna; receiving the blocks using one or more antennas; checking whether the blocks were received successfully; and, if the reception of the blocks failed, storing the received blocks in memory; retransmitting the same blocks in a predetermined format; receiving the retransmitted blocks and combining them with the blocks in memory, the predetermined format being selected in the method so that the blocks transmitted first and the retransmitted blocks form space-time block coding.

(Figure 3)